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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,389	01/26/2004	Stanton B. Gelvin	3220/95461	3359

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03/07/2007

EXAMINER

ZHENG, LI

ART UNIT

PAPER NUMBER

1638

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/766,389

Applicant(s)

GELVIN ET AL.

Examiner

Li Zheng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4 and 10-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's submission of new claims 13-14, amendments to claims 4 and 10-12, as well as amendments to the specification filed on 12/07/2006 are acknowledged.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. The objection to the specification is withdrawn in light of Applicants' amendments.
4. The objection to claim 10 is withdrawn in light of claim amendments.
5. The rejections of claims 4 and 11-12 under 35 U.S.C. 112, second paragraph, are withdrawn due to claim amendment.
6. The rejection of claim 10 under 35 U.S.C. 102(b) is withdrawn in light of claim amendment.

***Claim Rejections - 35 USC § 112***

8. The rejections of claims 4 and 10-12 under 35 U.S.C. 112 first paragraph, as failing to comply with the written description requirement, are withdrawn in light of claim amendments.

9. The rejections of claims 11 and 13 under 35 U.S.C. 112 first paragraph for enablement are withdrawn due to claim amendments.

10. Claims 10 remains and claims 13 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for transgenic plant/plant cell expressing an exogenous copy of plant H2A histone gene, does not reasonably provide enablement for any plant histone gene. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims, for the reasons of record stated in the Office action mailed September 19, 2006. Applicants traverse in the paper filed December 07, 2006. Applicants' arguments have been fully considered but were not found persuasive.

Applicants argue that based on the guidance of the specification regarding transformation efficiency and histone genes, a skilled artisan can readily practice the full scope of the invention as claimed (response, page 4, the second paragraph from bottom of the page). However, The specification only teaches that overexpression of

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RAT5 gene encoding a H2A histone protein in wild type Arabidopsis plant improves the transformation efficiency, histone genes also encompass at least genes in H3, H4, H1, H2A and H2B subfamilies. Neither the specification nor the prior art provides evidence to demonstrate that overexpressing of a plant histone protein other than a H2A histone protein could also increase transformation efficiency. The Applicants further state that if necessary, post-filing evidence regarding transformation efficiency of additional histone genes can be provided by the applicants. Applicants are reminded that any further information must be supported by the original specification.

In conclusion, given claim breadth, unpredictability of the art, and lack of guidance and additional working example, undue experimentation would have been required by one skilled in the art to practice the invention in full scope.

### ***Double Patenting***

11. The provisional statutory type double patenting rejections of claims 11 and 12 are withdrawn in light of claim amendments.

12. Claims 4 and 10 remain and claims 11-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8, 13, and 24 of copending Application No. 10/664,658 ('658), for the reasons of record stated in the Office action mailed September 19, 2006. However, Applicants state that if claims of the present application are found allowable, applicants will

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appropriately file a terminal disclaimer and/or cancel the conflicting claims in the co-pending application 10/664,658 (response, page 5, 3<sup>rd</sup> paragraph).

13. Claims 4 and 10-12 remain and claims 13-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 12 of copending Application No. 10/098,161, now U.S. Patent No. 7,122,716 (claim 5), for the reasons of record stated in the Office action mailed September 19, 2006. Applicants traverse in the paper filed December 07, 2006. Applicants' arguments have been fully considered but were not found persuasive.

The Applicants argue that patent '716 does not have any claims related to plant or plant host cell. It is true that claim 12 of copending Application No. 10,098,161 or claim 5 of patent '716 is drawn to a method for increasing the Agrobacterium transformation efficiency using a host plant expressing transgenically RAT5 of Arabidopsis encoding a H2A histone. However, the claimed transgenic plants in instant claims obviously would be produced by the method of claim 5 of patent '716.

### ***Summary***

Claims 4 and 10-14 are rejected.

No claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li Zheng whose telephone number is 571-272-8031. The examiner can normally be reached on Monday through Friday 9:00 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**ASHWIN D. MENTA, PH.D.**  
**PRIMARY EXAMINER**